

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Offenbach am Main 50.0994° N 8.7708° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem * gekennzeichnet, z.B.: 00:20*.

Spalte 1 Kalendertag.

Spalte 2 Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

Spalte 3 Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als -18°) und kein Mond stört.

Spalte 4 Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

Spalte 5 Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN₊ (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M_v (Monduntergang), AN₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M₇

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

Spalte 9 Beginn der astr. Morgendämmerung (Sonnenhöhe = -18°).

Spalte 10 Dauer der astr. Morgendämmerung.

Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = -12°).

Spalte 12 Dauer der naut. Morgendämmerung.

Spalte 13 Beginn der bürg. Morgendämmerung (Sonnenhöhe = -6°).

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

Spalte 19 Ende der bürg. Abenddämmerung (Sonnenhöhe = -6°).

Spalte 20 Dauer der naut. Abenddämmerung.

Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = -12°).

Spalte 22 Dauer der astr. Abenddämmerung.

Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = -18°).

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:

Spalte 26 Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als -12°) und kein Mond stört.

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

Spalte 28 Ereignisse, die die nutzbare Zeitspanne begrenzen: ND₊ (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M_v (Monduntergang), ND₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M₇ (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 29 Identisch zu Spalte 1.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024	
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 1. Jan		18:33 – 22:17	3h 43m	AN ₊ bis M ₇		22:17	11:28	06:22	39m	07:02	40m	07:42	40m	08:23	8h 09m	16:33	40m	17:13	40m	17:54	39m	18:33	15h 50m	11h 49m				Mo, 1. Jan
Di, 2. Jan		18:34 – 23:25	4h 50m	AN ₊ bis M ₇		23:25	11:40	06:23	39m	07:02	40m	07:42	40m	08:23	8h 10m	16:34	40m	17:14	40m	17:55	39m	18:34	15h 49m	11h 48m				Di, 2. Jan
Mi, 3. Jan		18:35 – 00:33*	5h 57m	AN ₊ bis M ₇		—:—	11:51	06:23	39m	07:02	40m	07:42	40m	08:23	8h 11m	16:35	40m	17:15	40m	17:56	39m	18:35	15h 47m	11h 47m				Mi, 3. Jan
Do, 4. Jan		18:36 – 01:43*	7h 06m	AN ₊ bis M ₇	☾	00:33	12:02	06:23	39m	07:02	40m	07:42	40m	08:23	8h 13m	16:36	40m	17:16	40m	17:57	39m	18:36	15h 46m	11h 46m				Do, 4. Jan
Fr, 5. Jan		18:37 – 02:56*	8h 18m	AN ₊ bis M ₇		01:43	12:15	06:23	39m	07:02	40m	07:42	40m	08:22	8h 14m	16:37	40m	17:17	40m	17:58	39m	18:37	15h 45m	11h 45m				Fr, 5. Jan
Sa, 6. Jan		18:38 – 04:13*	9h 34m	AN ₊ bis M ₇		02:56	12:31	06:22	39m	07:02	40m	07:42	40m	08:22	8h 16m	16:38	40m	17:18	40m	17:59	39m	18:38	15h 43m	11h 44m				Sa, 6. Jan
So, 7. Jan		18:39 – 05:33*	10h 53m	AN ₊ bis M ₇		04:13	12:51	06:22	39m	07:01	40m	07:42	40m	08:22	8h 17m	16:39	40m	17:20	40m	18:00	39m	18:39	15h 42m	11h 43m				So, 7. Jan
Mo, 8. Jan		18:40 – 06:22*	11h 42m	AN ₊ bis AN ₋		05:33	13:20	06:22	39m	07:01	40m	07:41	40m	08:21	8h 19m	16:41	40m	17:21	40m	18:01	39m	18:40	15h 40m	11h 42m				Mo, 8. Jan
Di, 9. Jan		18:41 – 06:22*	11h 40m	AN ₊ bis AN ₋		06:52	14:01	06:22	39m	07:01	40m	07:41	39m	08:21	8h 20m	16:42	39m	17:22	40m	18:02	39m	18:41	15h 38m	11h 40m				Di, 9. Jan
Mi, 10. Jan		18:42 – 06:21*	11h 39m	AN ₊ bis AN ₋		08:02	15:00	06:22	38m	07:01	40m	07:41	39m	08:21	8h 22m	16:43	39m	17:23	40m	18:03	39m	18:42	15h 36m	11h 39m				Mi, 10. Jan
Do, 11. Jan		18:43 – 06:21*	11h 37m	AN ₊ bis AN ₋	☉	08:58	16:17	06:21	38m	07:00	39m	07:40	39m	08:20	8h 24m	16:45	39m	17:24	39m	18:04	38m	18:43	15h 34m	11h 37m				Do, 11. Jan
Fr, 12. Jan		18:44 – 06:21*	11h 36m	AN ₊ bis AN ₋		09:37	17:46	06:21	38m	07:00	39m	07:40	39m	08:19	8h 26m	16:46	39m	17:26	39m	18:05	38m	18:44	15h 32m	11h 36m				Fr, 12. Jan
Sa, 13. Jan		19:17 – 06:20*	11h 02m	M _\ bis AN ₋		10:06	19:17	06:21	38m	07:00	39m	07:39	39m	08:19	8h 28m	16:47	39m	17:27	39m	18:07	38m	18:46	15h 30m	11h 34m				Sa, 13. Jan
So, 14. Jan		20:47 – 06:20*	9h 32m	M _\ bis AN ₋		10:26	20:47	06:20	38m	06:59	39m	07:39	39m	08:18	8h 30m	16:49	39m	17:28	39m	18:08	38m	18:47	15h 28m	11h 33m				So, 14. Jan
Mo, 15. Jan		22:13 – 06:19*	8h 05m	M _\ bis AN ₋		10:43	22:13	06:20	38m	06:59	39m	07:38	39m	08:17	8h 32m	16:50	39m	17:30	39m	18:09	38m	18:48	15h 26m	11h 31m				Mo, 15. Jan
Di, 16. Jan		23:37 – 06:19*	6h 41m	M _\ bis AN ₋		10:58	23:37	06:19	38m	06:58	39m	07:38	39m	08:17	8h 35m	16:52	39m	17:31	39m	18:10	38m	18:49	15h 24m	11h 29m				Di, 16. Jan
Mi, 17. Jan		00:59* – 06:18*	5h 18m	M _\ bis AN ₋		11:12	—:—	06:19	38m	06:57	39m	07:37	39m	08:16	8h 37m	16:53	39m	17:32	39m	18:12	38m	18:50	15h 21m	11h 27m				Mi, 17. Jan
Do, 18. Jan		02:21* – 06:17*	3h 56m	M _\ bis AN ₋	☾	11:27	00:59	06:18	38m	06:57	39m	07:36	38m	08:15	8h 39m	16:55	38m	17:34	39m	18:13	38m	18:52	15h 19m	11h 25m				Do, 18. Jan
Fr, 19. Jan		03:43* – 06:17*	2h 33m	M _\ bis AN ₋		11:45	02:21	06:17	38m	06:56	39m	07:35	38m	08:14	8h 42m	16:56	38m	17:35	39m	18:14	38m	18:53	15h 16m	11h 23m				Fr, 19. Jan
Sa, 20. Jan		05:02* – 06:16*	1h 13m	M _\ bis AN ₋		12:08	03:43	06:17	38m	06:55	39m	07:34	38m	08:13	8h 44m	16:58	38m	17:37	39m	18:16	38m	18:54	15h 14m	11h 21m				Sa, 20. Jan
So, 21. Jan		06:14* – 06:15*	0m	M _\ bis AN ₋		12:38	05:02	06:16	38m	06:55	39m	07:34	38m	08:12	8h 47m	16:59	38m	17:38	39m	18:17	38m	18:56	15h 11m	11h 19m				So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:20	06:14	06:15	38m	06:54	39m	07:33	38m	08:11	8h 49m	17:01	38m	17:39	39m	18:19	38m	18:57	15h 09m	11h 17m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:13	07:15	06:15	38m	06:53	38m	07:32	38m	08:10	8h 52m	17:03	38m	17:41	38m	18:20	38m	18:58	15h 06m	11h 15m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:18	08:02	06:14	38m	06:52	38m	07:31	38m	08:09	8h 55m	17:04	38m	17:42	38m	18:21	38m	19:00	15h 03m	11h 13m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☉	16:29	08:36	06:13	38m	06:51	38m	07:30	38m	08:08	8h 58m	17:06	38m	17:44	38m	18:23	38m	19:01	15h 00m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:42	09:01	06:12	38m	06:50	38m	07:29	37m	08:07	9h 00m	17:08	37m	17:45	38m	18:24	38m	19:02	14h 57m	11h 08m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:54	09:19	06:11	38m	06:49	38m	07:28	37m	08:05	9h 03m	17:09	37m	17:47	38m	18:26	38m	19:04	14h 54m	11h 06m				Sa, 27. Jan
So, 28. Jan		19:05 – 20:04	58m	AN ₊ bis M ₇		20:04	09:34	06:10	38m	06:48	38m	07:26	37m	08:04	9h 06m	17:11	37m	17:49	38m	18:27	38m	19:05	14h 51m	11h 03m				So, 28. Jan
Mo, 29. Jan		19:07 – 21:12	2h 05m	AN ₊ bis M ₇		21:12	09:46	06:09	37m	06:47	38m	07:25	37m	08:03	9h 09m	17:13	37m	17:50	38m	18:29	38m	19:07	14h 48m	11h 01m				Mo, 29. Jan
Di, 30. Jan		19:08 – 22:20	3h 11m	AN ₊ bis M ₇		22:20	09:58	06:08	37m	06:46	38m	07:24	37m	08:01	9h 12m	17:14	37m	17:52	38m	18:30	37m	19:08	14h 45m	10h 58m				Di, 30. Jan
Mi, 31. Jan		19:09 – 23:28	4h 18m	AN ₊ bis M ₇		23:28	10:09	06:07	37m	06:45	38m	07:23	37m	08:00	9h 15m	17:16	37m	17:53	38m	18:32	37m	19:09	14h 42m	10h 56m				Mi, 31. Jan
Do, 1. Feb		19:11 – 00:39*	5h 27m	AN ₊ bis M ₇		—:—	10:21	06:06	37m	06:43	38m	07:22	37m	07:59	9h 19m	17:18	37m	17:55	38m	18:33	37m	19:11	14h 39m	10h 53m				Do, 1. Feb
Fr, 2. Feb		19:12 – 01:52*	6h 39m	AN ₊ bis M ₇		00:39	10:34	06:04	37m	06:42	38m	07:20	37m	07:57	9h 22m	17:19	37m	17:56	38m	18:35	37m	19:12	14h 36m	10h 50m				Fr, 2. Feb
Sa, 3. Feb		19:14 – 03:09*	7h 55m	AN ₊ bis M ₇	☾	01:52	10:52	06:03	37m	06:41	37m	07:19	36m	07:56	9h 25m	17:21	36m	17:58	38m	18:36	37m	19:14	14h 33m	10h 48m				Sa, 3. Feb
So, 4. Feb		19:15 – 04:27*	9h 11m	AN ₊ bis M ₇		03:09	11:15	06:02	37m	06:40	37m	07:18	36m	07:54	9h 28m	17:23	36m	18:00	37m	18:38	37m	19:15	14h 29m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:17 – 05:41*	10h 24m	AN ₊ bis M ₇		04:27	11:49	06:01	37m	06:38	37m	07:16	36m	07:53	9h 31m	17:25	36m	18:01	37m	18:39	37m	19:17	14h 26m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:18 – 05:58*	10h 39m	AN ₊ bis AN ₋		05:41	12:38	05:59	37m	06:37	37m	07:15	36m	07:51	9h 35m	17:26	36m	18:03	37m	18:41	37m	19:18	14h 23m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:20 – 05:56*	10h 36m	AN ₊ bis AN ₋		06:43	13:45	05:58	37m	06:36	37m	07:13	36m	07:50	9h 38m	17:28	36m	18:04	37m	18:42	37m	19:20	14h 19m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:21 – 05:55*	10h 33m	AN ₊ bis AN ₋		07:30	15:09	05:56	37m	06:34	37m	07:12	36m	07:48	9h 41m	17:30	36m	18:06	37m	18:44	37m	19:21	14h 16m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:23 – 05:54*	10h 30m	AN ₊ bis AN ₋	☉	08:04	16:42	05:55	37m	06:33	37m	07:10	36m	07:46	9h 45m	17:32	36m	18:08	37m	18:45	37m	19:23	14h 13m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:24 – 05:52*	10h 27m	AN ₊ bis AN ₋		08:28	18:15	05:54	37m	06:31	37m	07:09	36m	07:45	9h 48m	17:33	36m	18:09	37m	18:47	37m	19:24	14h 09m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:46 – 05:51*	10h 04m	M _\ bis AN ₋		08:47	19:46	05:52	37m	06:30	37m	07:07	35m	07:43	9h 52m	17:35	36m	18:11	37m	18:48	37m	19:26	14h 06m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:15 – 05:49*																										

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	\uparrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Di, 20. Feb		—:—:—:—	—	Mond stört		13:08	06:03	05:37	37m	06:15	36m	06:51	35m	07:27	10h 23m	17:51	35m	18:26	36m	19:03	37m	19:40	13h 34m	9h 55m				Di, 20. Feb
Mi, 21. Feb		—:—:—:—	—	Mond stört		14:17	06:40	05:35	37m	06:13	36m	06:50	35m	07:25	10h 27m	17:52	35m	18:27	36m	19:04	37m	19:42	13h 30m	9h 51m				Mi, 21. Feb
Do, 22. Feb		—:—:—:—	—	Mond stört		15:30	07:06	05:34	37m	06:11	36m	06:48	34m	07:23	10h 31m	17:54	35m	18:29	36m	19:06	37m	19:43	13h 26m	9h 48m				Do, 22. Feb
Fr, 23. Feb		—:~:~:~:~	—	Mond stört		16:42	07:26	05:32	37m	06:09	36m	06:46	34m	07:21	10h 34m	17:56	34m	18:31	36m	19:07	37m	19:45	13h 23m	9h 44m				Fr, 23. Feb
Sa, 24. Feb		—:~:~:~:~	—	Mond stört	○	17:53	07:42	05:30	37m	06:07	36m	06:44	34m	07:19	10h 38m	17:57	34m	18:32	36m	19:09	37m	19:47	13h 19m	9h 41m				Sa, 24. Feb
So, 25. Feb		—:~:~:~:~	—	Mond stört		19:02	07:54	05:28	37m	06:05	36m	06:42	34m	07:17	10h 42m	17:59	34m	18:34	36m	19:11	37m	19:48	13h 15m	9h 37m				So, 25. Feb
Mo, 26. Feb		19:50–20:09	19m	AN ₊ bis M ₇		20:09	08:06	05:26	37m	06:03	36m	06:40	34m	07:15	10h 45m	18:01	34m	18:35	36m	19:12	37m	19:50	13h 12m	9h 34m				Mo, 26. Feb
Di, 27. Feb		19:52–21:18	1h 26m	AN ₊ bis M ₇		21:18	08:16	05:24	37m	06:01	36m	06:38	34m	07:13	10h 49m	18:02	34m	18:37	36m	19:14	37m	19:52	13h 08m	9h 30m				Di, 27. Feb
Mi, 28. Feb		19:53–22:27	2h 33m	AN ₊ bis M ₇		22:27	08:28	05:22	37m	06:00	36m	06:36	34m	07:11	10h 53m	18:04	34m	18:39	36m	19:15	37m	19:53	13h 04m	9h 26m				Mi, 28. Feb
Do, 29. Feb		19:55–23:39	3h 44m	AN ₊ bis M ₇		23:39	08:40	05:20	37m	05:58	36m	06:34	34m	07:09	10h 56m	18:06	34m	18:40	36m	19:17	37m	19:55	13h 00m	9h 23m				Do, 29. Feb
Fr, 1. Mär		19:57–00:54*	4h 57m	AN ₊ bis M ₇		—:~	08:56	05:18	37m	05:56	36m	06:32	34m	07:07	11h 00m	18:07	34m	18:42	36m	19:19	37m	19:57	12h 57m	9h 19m				Fr, 1. Mär
Sa, 2. Mär		19:58–02:10*	6h 11m	AN ₊ bis M ₇		00:54	09:16	05:16	37m	05:54	36m	06:30	34m	07:05	11h 04m	18:09	34m	18:44	36m	19:20	37m	19:58	12h 53m	9h 15m				Sa, 2. Mär
So, 3. Mär		20:00–03:24*	7h 24m	AN ₊ bis M ₇	●	02:10	09:44	05:14	37m	05:51	36m	06:28	34m	07:03	11h 08m	18:11	34m	18:45	36m	19:22	37m	20:00	12h 49m	9h 11m				So, 3. Mär
Mo, 4. Mär		20:02–04:30*	8h 28m	AN ₊ bis M ₇		03:24	10:25	05:12	37m	05:49	36m	06:26	34m	07:00	11h 11m	18:12	34m	18:47	36m	19:24	37m	20:02	12h 46m	9h 07m				Mo, 4. Mär
Di, 5. Mär		20:03–05:07*	9h 04m	AN ₊ bis AN ₋		04:30	11:22	05:09	37m	05:47	36m	06:24	34m	06:58	11h 15m	18:14	34m	18:48	36m	19:25	38m	20:03	12h 42m	9h 04m				Di, 5. Mär
Mi, 6. Mär		20:05–05:05*	9h 00m	AN ₊ bis AN ₋		05:22	12:36	05:07	37m	05:45	36m	06:22	34m	06:56	11h 19m	18:16	34m	18:50	36m	19:27	38m	20:05	12h 38m	9h 00m				Mi, 6. Mär
Do, 7. Mär		20:07–05:03*	8h 56m	AN ₊ bis AN ₋		06:00	14:03	05:05	38m	05:43	36m	06:20	34m	06:54	11h 23m	18:17	34m	18:52	36m	19:29	38m	20:07	12h 34m	8h 56m				Do, 7. Mär
Fr, 8. Mär		20:08–05:01*	8h 52m	AN ₊ bis AN ₋		06:28	15:36	05:03	38m	05:41	36m	06:18	34m	06:52	11h 26m	18:19	34m	18:53	36m	19:30	38m	20:08	12h 30m	8h 52m				Fr, 8. Mär
Sa, 9. Mär		20:10–04:58*	8h 48m	AN ₊ bis AN ₋		06:49	17:09	05:01	38m	05:39	36m	06:16	34m	06:50	11h 30m	18:21	34m	18:55	36m	19:32	38m	20:10	12h 27m	8h 48m				Sa, 9. Mär
So, 10. Mär		20:12–04:56*	8h 44m	AN ₊ bis AN ₋	●	07:06	18:40	04:58	38m	05:37	36m	06:14	34m	06:48	11h 34m	18:22	34m	18:57	36m	19:33	38m	20:12	12h 23m	8h 44m				So, 10. Mär
Mo, 11. Mär		20:14–04:54*	8h 40m	AN ₊ bis AN ₋		07:21	20:09	04:56	38m	05:35	36m	06:11	34m	06:46	11h 38m	18:24	34m	18:58	36m	19:35	38m	20:14	12h 19m	8h 40m				Mo, 11. Mär
Di, 12. Mär		21:38–04:52*	7h 13m	M _\ bis AN ₋		07:36	21:38	04:54	38m	05:32	36m	06:09	34m	06:43	11h 41m	18:25	34m	19:00	37m	19:37	38m	20:15	12h 15m	8h 36m				Di, 12. Mär
Mi, 13. Mär		23:07–04:49*	5h 42m	M _\ bis AN ₋		07:52	23:07	04:52	38m	05:30	36m	06:07	34m	06:41	11h 45m	18:27	34m	19:01	37m	19:38	38m	20:17	12h 12m	8h 31m				Mi, 13. Mär
Do, 14. Mär		00:33*–04:47*	4h 13m	M _\ bis AN ₋		08:12	—:~	04:49	38m	05:28	37m	06:05	34m	06:39	11h 49m	18:29	34m	19:03	37m	19:40	38m	20:19	12h 08m	8h 27m				Do, 14. Mär
Fr, 15. Mär		01:55*–04:44*	2h 49m	M _\ bis AN ₋		08:38	00:33	04:47	38m	05:26	37m	06:03	34m	06:37	11h 53m	18:30	34m	19:05	37m	19:42	39m	20:21	12h 04m	8h 23m				Fr, 15. Mär
Sa, 16. Mär		03:05*–04:42*	1h 36m	M _\ bis AN ₋		09:13	01:55	04:44	38m	05:23	37m	06:01	34m	06:35	11h 57m	18:32	34m	19:06	37m	19:44	39m	20:23	12h 00m	8h 19m				Sa, 16. Mär
So, 17. Mär		04:01*–04:40*	38m	M _\ bis AN ₋	●	10:00	03:05	04:42	39m	05:21	37m	05:58	34m	06:33	12h 00m	18:34	34m	19:08	37m	19:45	39m	20:25	11h 56m	8h 15m				So, 17. Mär
Mo, 18. Mär		—:~:~:~:~	—	Mond stört		10:59	04:01	04:40	39m	05:19	37m	05:56	34m	06:30	12h 04m	18:35	34m	19:10	37m	19:47	39m	20:26	11h 53m	8h 10m				Mo, 18. Mär
Di, 19. Mär		—:~:~:~:~	—	Mond stört		12:07	04:43	04:37	39m	05:17	37m	05:54	34m	06:28	12h 08m	18:37	34m	19:11	37m	19:49	39m	20:28	11h 49m	8h 06m				Di, 19. Mär
Mi, 20. Mär		—:~:~:~:~	—	Mond stört		13:19	05:12	04:35	39m	05:14	37m	05:52	34m	06:26	12h 12m	18:38	34m	19:13	37m	19:50	39m	20:30	11h 45m	8h 02m				Mi, 20. Mär
Do, 21. Mär		—:~:~:~:~	—	Mond stört		14:31	05:34	04:32	39m	05:12	37m	05:50	34m	06:24	12h 16m	18:40	34m	19:14	37m	19:52	39m	20:32	11h 41m	7h 57m				Do, 21. Mär
Fr, 22. Mär		—:~:~:~:~	—	Mond stört		15:42	05:50	04:30	39m	05:10	37m	05:47	34m	06:22	12h 19m	18:42	34m	19:16	37m	19:54	40m	20:34	11h 38m	7h 53m				Fr, 22. Mär
Sa, 23. Mär		—:~:~:~:~	—	Mond stört		16:51	06:03	04:27	40m	05:07	37m	05:45	34m	06:20	12h 23m	18:43	34m	19:18	37m	19:55	40m	20:36	11h 34m	7h 48m				Sa, 23. Mär
So, 24. Mär		—:~:~:~:~	—	Mond stört		18:00	06:15	04:25	40m	05:05	37m	05:43	34m	06:17	12h 27m	18:45	34m	19:19	37m	19:57	40m	20:38	11h 30m	7h 44m				So, 24. Mär
Mo, 25. Mär		—:~:~:~:~	—	Mond stört	○	19:08	06:25	04:22	40m	05:03	37m	05:41	34m	06:15	12h 31m	18:46	34m	19:21	38m	19:59	40m	20:40	11h 26m	7h 40m				Mo, 25. Mär
Di, 26. Mär		—:~:~:~:~	—	Mond stört		20:17	06:36	04:20	40m	05:00	38m	05:38	34m	06:13	12h 34m	18:48	34m	19:23	38m	20:01	40m	20:42	11h 22m	7h 35m				Di, 26. Mär
Mi, 27. Mär		20:44–21:29	44m	AN ₊ bis M ₇		21:29	06:48	04:17	40m	04:58	38m	05:36	34m	06:11	12h 38m	18:49	34m	19:24	38m	20:02	41m	20:44	11h 19m	7h 30m				Mi, 27. Mär
Do, 28. Mär		20:46–22:43	1h 56m	AN ₊ bis M ₇		22:43	07:03	04:15	41m	04:56	38m	05:34	34m	06:09	12h 42m	18:51	34m	19:26	38m	20:04	41m	20:46	11h 15m	7h 26m				Do, 28. Mär
Fr, 29. Mär		20:48–23:58	3h 10m	AN ₊ bis M ₇		23:58	07:21	04:12	41m	04:53	38m	05:32	34m	06:06	12h 46m	18:53	34m	19:27	38m	20:06	41m	20:48	11h 11m	7h 21m				Fr, 29. Mär
Sa, 30. Mär		20:50–01:13*	4h 23m	AN ₊ bis M ₇		—:~	07:46	04:09	41m	04:51	38m	05:29	34m	06:04	12h 49m	18:54	34m	19:29	38m	20:08	41m	20:50	11h 07m	7h 16m				Sa, 30. Mär
So, 31. Mär	MESZ	21:52–03:21*	5h 28m	AN ₊ bis M ₇		02:13	09:21	05:07	41m	05:49	38m	06:27	34m	07:02	12h 53m	19:56	35m	20:31	38m	21:10	42m	21:52	11h 04m	7h 12m				So, 31. Mär
Mo, 1. Apr	MESZ	21:54–04:16*	6h 22m	AN ₊ bis M ₇		03:21	10:11	05:04	42m	05:46	38m	06:25	34m	07:00	12h 57m	19:57	35m	20:32	39m	21:11	42m	21:54	11h 00m	7h 07m				Mo, 1. Apr
Di, 2. Apr	MESZ	21:56–04:58*	7h 02m	AN ₊ bis M ₇	●	04:16	11:17	05:01	42m	05:44	38m	06:23	35m	06:58	13h 01m	19:59	35m	20:34	39m	21:13	42m	21:56	10h 56m					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mi, 10. Apr	MESZ	23:02–04:37*	5h 34m	M _\ bis AN _\		07:13	23:02	04:39	45m	05:24	40m	06:05	35m	06:41	13h 30m	20:12	36m	20:48	40m	21:28	45m	22:14	10h 27m	6h 22m				Mi, 10. Apr
Do, 11. Apr	MESZ	00:30*–04:34*	4h 03m	M _\ bis AN _\		07:37	—:—	04:37	45m	05:22	40m	06:03	35m	06:39	13h 34m	20:13	36m	20:49	40m	21:30	45m	22:16	10h 23m	6h 17m				Do, 11. Apr
Fr, 12. Apr	MESZ	01:49*–04:31*	2h 42m	M _\ bis AN _\		08:08	00:30	04:34	45m	05:20	40m	06:00	36m	06:37	13h 38m	20:15	36m	20:51	41m	21:32	46m	22:18	10h 19m	6h 12m				Fr, 12. Apr
Sa, 13. Apr	MESZ	02:53*–04:28*	1h 34m	M _\ bis AN _\		08:50	01:49	04:31	46m	05:17	41m	05:58	36m	06:34	13h 41m	20:16	36m	20:53	41m	21:34	46m	22:21	10h 16m	6h 07m				Sa, 13. Apr
So, 14. Apr	MESZ	03:41*–04:25*	44m	M _\ bis AN _\		09:46	02:53	04:28	46m	05:15	41m	05:56	36m	06:32	13h 45m	20:18	36m	20:54	41m	21:36	47m	22:23	10h 12m	6h 02m				So, 14. Apr
Mo, 15. Apr	MESZ	04:15*–04:22*	7m	M _\ bis AN _\	☾	10:53	03:41	04:25	47m	05:12	41m	05:54	36m	06:30	13h 49m	20:19	36m	20:56	41m	21:38	47m	22:25	10h 08m	5h 56m				Mo, 15. Apr
Di, 16. Apr	MESZ	—:—:—:—	–	Mond stört		12:05	04:15	04:22	47m	05:10	41m	05:52	36m	06:28	13h 52m	20:21	36m	20:58	42m	21:40	48m	22:28	10h 05m	5h 51m				Di, 16. Apr
Mi, 17. Apr	MESZ	—:—:—:—	–	Mond stört		13:19	04:39	04:19	48m	05:07	42m	05:49	36m	06:26	13h 56m	20:23	36m	21:00	42m	21:42	48m	22:30	10h 01m	5h 46m				Mi, 17. Apr
Do, 18. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:30	04:57	04:16	48m	05:05	42m	05:47	36m	06:24	13h 59m	20:24	37m	21:01	42m	21:44	49m	22:33	9h 58m	5h 40m				Do, 18. Apr
Fr, 19. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:40	05:11	04:14	49m	05:03	42m	05:45	37m	06:22	14h 03m	20:26	37m	21:03	42m	21:46	49m	22:35	9h 54m	5h 35m				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:~:~:~:~	–	Mond stört		16:49	05:23	04:11	49m	05:00	42m	05:43	37m	06:20	14h 07m	20:27	37m	21:05	43m	21:48	50m	22:38	9h 50m	5h 29m				Sa, 20. Apr
So, 21. Apr	MESZ	—:~:~:~:~	–	Mond stört		17:57	05:34	04:08	50m	04:58	43m	05:41	37m	06:18	14h 10m	20:29	37m	21:06	43m	21:50	50m	22:41	9h 47m	5h 23m				So, 21. Apr
Mo, 22. Apr	MESZ	—:~:~:~:~	–	Mond stört		19:06	05:45	04:05	50m	04:55	43m	05:39	37m	06:16	14h 14m	20:30	37m	21:08	43m	21:52	51m	22:43	9h 43m	5h 18m				Mo, 22. Apr
Di, 23. Apr	MESZ	—:~:~:~:~	–	Mond stört		20:17	05:57	04:02	51m	04:53	43m	05:37	37m	06:14	14h 17m	20:32	37m	21:10	44m	21:54	51m	22:46	9h 40m	5h 12m				Di, 23. Apr
Mi, 24. Apr	MESZ	—:~:~:~:~	–	Mond stört	☾	21:31	06:10	03:59	51m	04:50	44m	05:35	37m	06:12	14h 21m	20:34	38m	21:12	44m	21:56	52m	22:49	9h 36m	5h 06m				Mi, 24. Apr
Do, 25. Apr	MESZ	—:~:~:~:~	–	Mond stört		22:47	06:27	03:56	52m	04:48	44m	05:32	38m	06:11	14h 24m	20:35	38m	21:13	44m	21:58	53m	22:51	9h 33m	5h 01m				Do, 25. Apr
Fr, 26. Apr	MESZ	22:54–00:03*	1h 08m	AN ₊ bis M ₇		—:—	06:50	03:52	53m	04:46	44m	05:30	38m	06:09	14h 28m	20:37	38m	21:15	45m	22:00	53m	22:54	9h 30m	4h 55m				Fr, 26. Apr
Sa, 27. Apr	MESZ	22:57–01:13*	2h 16m	AN ₊ bis M ₇		00:03	07:22	03:49	53m	04:43	45m	05:28	38m	06:07	14h 31m	20:38	38m	21:17	45m	22:02	54m	22:57	9h 26m	4h 49m				Sa, 27. Apr
So, 28. Apr	MESZ	23:00–02:13*	3h 12m	AN ₊ bis M ₇		01:13	08:07	03:46	54m	04:41	45m	05:26	38m	06:05	14h 34m	20:40	38m	21:19	45m	22:04	55m	23:00	9h 23m	4h 43m				So, 28. Apr
Mo, 29. Apr	MESZ	23:03–02:58*	3h 55m	AN ₊ bis M ₇		02:13	09:08	03:43	55m	04:39	45m	05:24	38m	06:03	14h 38m	20:41	39m	21:20	46m	22:06	56m	23:03	9h 19m	4h 37m				Mo, 29. Apr
Di, 30. Apr	MESZ	23:06–03:31*	4h 25m	AN ₊ bis M ₇		02:58	10:22	03:40	56m	04:36	46m	05:22	39m	06:01	14h 41m	20:43	39m	21:22	46m	22:09	57m	23:06	9h 16m	4h 31m				Di, 30. Apr
Mi, 1. Mai	MESZ	23:09–03:34*	4h 24m	AN ₊ bis AN _\	☾	03:31	11:46	03:37	57m	04:34	46m	05:20	39m	06:00	14h 44m	20:44	39m	21:24	46m	22:11	57m	23:09	9h 13m	4h 24m				Mi, 1. Mai
Do, 2. Mai	MESZ	23:12–03:30*	4h 18m	AN ₊ bis AN _\		03:55	13:12	03:34	57m	04:32	46m	05:18	39m	05:58	14h 48m	20:46	39m	21:26	47m	22:13	58m	23:12	9h 10m	4h 18m				Do, 2. Mai
Fr, 3. Mai	MESZ	23:15–03:27*	4h 12m	AN ₊ bis AN _\		04:14	14:39	03:30	58m	04:29	47m	05:16	39m	05:56	14h 51m	20:47	39m	21:27	47m	22:15	59m	23:15	9h 06m	4h 12m				Fr, 3. Mai
Sa, 4. Mai	MESZ	23:18–03:24*	4h 06m	AN ₊ bis AN _\		04:30	16:05	03:27	59m	04:27	47m	05:14	39m	05:54	14h 54m	20:49	40m	21:29	48m	22:17	1h 00m	23:18	9h 03m	4h 06m				Sa, 4. Mai
So, 5. Mai	MESZ	23:21–03:21*	3h 59m	AN ₊ bis AN _\		04:44	17:31	03:24	1h 00m	04:25	47m	05:13	40m	05:53	14h 57m	20:51	40m	21:31	48m	22:19	1h 01m	23:21	9h 00m	3h 59m				So, 5. Mai
Mo, 6. Mai	MESZ	23:24–03:17*	3h 53m	AN ₊ bis AN _\		04:59	18:59	03:21	1h 01m	04:22	48m	05:11	40m	05:51	15h 01m	20:52	40m	21:32	48m	22:21	1h 02m	23:24	8h 57m	3h 53m				Mo, 6. Mai
Di, 7. Mai	MESZ	23:27–03:14*	3h 46m	AN ₊ bis AN _\		05:15	20:28	03:17	1h 02m	04:20	48m	05:09	40m	05:49	15h 04m	20:54	40m	21:34	49m	22:23	1h 04m	23:27	8h 54m	3h 46m				Di, 7. Mai
Mi, 8. Mai	MESZ	23:31–03:10*	3h 39m	AN ₊ bis AN _\	☾	05:36	21:58	03:14	1h 03m	04:18	49m	05:07	40m	05:48	15h 07m	20:55	40m	21:36	49m	22:26	1h 05m	23:31	8h 51m	3h 39m				Mi, 8. Mai
Do, 9. Mai	MESZ	23:34–03:07*	3h 32m	AN ₊ bis AN _\		06:03	23:23	03:10	1h 05m	04:16	49m	05:05	40m	05:46	15h 10m	20:57	41m	21:38	50m	22:28	1h 06m	23:34	8h 48m	3h 32m				Do, 9. Mai
Fr, 10. Mai	MESZ	00:36*–03:03*	2h 27m	M _\ bis AN _\		06:40	—:—	03:07	1h 06m	04:13	50m	05:03	41m	05:45	15h 13m	20:58	41m	21:39	50m	22:30	1h 07m	23:38	8h 45m	3h 25m				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:33*–03:00*	1h 27m	M _\ bis AN _\		07:31	00:36	03:03	1h 07m	04:11	50m	05:02	41m	05:43	15h 16m	20:59	41m	21:41	51m	22:32	1h 09m	23:41	8h 42m	3h 18m				Sa, 11. Mai
So, 12. Mai	MESZ	02:13*–02:56*	43m	M _\ bis AN _\		08:35	01:33	03:00	1h 09m	04:09	50m	05:00	41m	05:42	15h 19m	21:01	41m	21:43	51m	22:34	1h 10m	23:45	8h 39m	3h 11m				So, 12. Mai
Mo, 13. Mai	MESZ	02:42*–02:53*	10m	M _\ bis AN _\		09:47	02:13	02:56	1h 10m	04:07	51m	04:58	41m	05:40	15h 22m	21:02	42m	21:44	51m	22:36	1h 12m	23:48	8h 36m	3h 04m				Mo, 13. Mai
Di, 14. Mai	MESZ	—:~:~:~:~	–	Mond stört		11:02	02:42	02:53	1h 12m	04:05	51m	04:57	42m	05:39	15h 25m	21:04	42m	21:46	52m	22:38	1h 13m	23:52	8h 33m	2h 56m				Di, 14. Mai
Mi, 15. Mai	MESZ	—:~:~:~:~	–	Mond stört	☾	12:16	03:02	02:49	1h 13m	04:03	52m	04:55	42m	05:37	15h 27m	21:05	42m	21:48	52m	22:41	1h 15m	23:56	8h 30m	2h 49m				Mi, 15. Mai
Do, 16. Mai	MESZ	—:~:~:~:~	–	Mond stört		13:27	03:18	02:45	1h 15m	04:01	52m	04:53	42m	05:36	15h 30m	21:07	42m	21:49	53m	22:43	1h 17m	00:00*	8h 27m	2h 41m				Do, 16. Mai
Fr, 17. Mai	MESZ	—:~:~:~:~	–	Mond stört		14:36	03:31	02:41	1h 17m	03:59	53m	04:52	42m	05:35	15h 33m	21:08	42m	21:51	53m	22:45	1h 19m	00:04*	8h 25m	2h 33m				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:44	03:42	02:37	1h 19m	03:57	53m	04:50	42m	05:33	15h 36m	21:09	43m	21:53	54m	22:47	1h 21m	00:08*	8h 22m	2h 25m				Sa, 18. Mai
So, 19. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:52	03:53	02:33	1h 21m	03:55	54m	04:49	43m	05:32	15h 38m	21:11	43m	21:54	54m	22:49	1h 23m	00:13*	8h 20m	2h 16m				So, 19. Mai
Mo, 20. Mai	MESZ	—:~:~:~:~	–	Mond stört		18:02	04:04	02:29	1h 23m	03:53	54m	04:47	43m	05:31	15h 41m	21:12	43m	21:56	55m	22:51	1h 26m	00:17*	8h 17m	2h 07m				Mo, 20. Mai
Di, 21. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:15	04:17	02:25	1h 26m	03:51	55m	04:46	43m	05:30	15h 43m	21:13	43m	21:57	55m	22:53	1h 28m	00:22*	8h 15m	1h 58m				Di, 21. Mai
Mi, 22. Mai	MESZ	—:~:~:~:~	–	Mond stört		20:31	04:33	02:20	1h 28m	03:49	55m</																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung				Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 30. Mai	MESZ			Astr. MD	☾	02:20	12:25	—:—		03:35	59m	04:35	45m	05:21	16h 03m	21:24	45m	22:10	1h 00m	23:10		—:—	7h 55m		23:10–02:36*	3h 26m	ND ₊ bis M ₇	Do, 30. Mai
Fr, 31. Mai	MESZ			Astr. MD		02:36	13:48	—:—		03:34	1h 00m	04:34	45m	05:20	16h 05m	21:25	45m	22:11	1h 00m	23:12		—:—	7h 54m		23:12–02:51*	3h 38m	ND ₊ bis M ₇	Fr, 31. Mai
Sa, 1. Jun	MESZ			Astr. MD		02:51	15:12	—:—		03:32	1h 00m	04:33	45m	05:19	16h 06m	21:26	46m	22:12	1h 01m	23:13		—:—	7h 52m		23:13–03:05*	3h 51m	ND ₊ bis M ₇	Sa, 1. Jun
So, 2. Jun	MESZ			Astr. MD		03:05	16:36	—:—		03:31	1h 01m	04:32	46m	05:18	16h 08m	21:27	46m	22:13	1h 01m	23:15		—:—	7h 50m		23:15–03:20*	4h 04m	ND ₊ bis M ₇	So, 2. Jun
Mo, 3. Jun	MESZ			Astr. MD		03:20	18:02	—:—		03:30	1h 01m	04:32	46m	05:18	16h 10m	21:28	46m	22:15	1h 02m	23:17		—:—	7h 49m		23:17–03:29*	4h 11m	ND ₊ bis ND ₋	Mo, 3. Jun
Di, 4. Jun	MESZ			Astr. MD		03:38	19:30	—:—		03:29	1h 02m	04:31	46m	05:17	16h 11m	21:29	46m	22:16	1h 02m	23:18		—:—	7h 47m		23:18–03:27*	4h 09m	ND ₊ bis ND ₋	Di, 4. Jun
Mi, 5. Jun	MESZ			Astr. MD		04:01	20:56	—:—		03:27	1h 02m	04:30	46m	05:17	16h 13m	21:30	46m	22:17	1h 02m	23:20		—:—	7h 46m		23:20–03:26*	4h 06m	ND ₊ bis ND ₋	Mi, 5. Jun
Do, 6. Jun	MESZ			Astr. MD	☀	04:34	22:15	—:—		03:26	1h 02m	04:29	46m	05:16	16h 14m	21:31	46m	22:18	1h 03m	23:21		—:—	7h 45m		23:21–03:25*	4h 04m	ND ₊ bis ND ₋	Do, 6. Jun
Fr, 7. Jun	MESZ			Astr. MD		05:18	23:19	—:—		03:25	1h 03m	04:29	46m	05:16	16h 15m	21:31	47m	22:19	1h 03m	23:22		—:—	7h 43m		23:22–03:24*	4h 02m	ND ₊ bis ND ₋	Fr, 7. Jun
Sa, 8. Jun	MESZ			Astr. MD		06:17	—:—	—:—		03:24	1h 03m	04:28	47m	05:15	16h 16m	21:32	47m	22:20	1h 04m	23:24		—:—	7h 42m		00:07*–03:24*	3h 16m	M _\ bis ND ₋	Sa, 8. Jun
So, 9. Jun	MESZ			Astr. MD		07:27	00:07	—:—		03:24	1h 04m	04:28	47m	05:15	16h 18m	21:33	47m	22:20	1h 04m	23:25		—:—	7h 41m		00:41*–03:23*	2h 41m	M _\ bis ND ₋	So, 9. Jun
Mo, 10. Jun	MESZ			Astr. MD		08:43	00:41	—:—		03:23	1h 04m	04:27	47m	05:15	16h 19m	21:34	47m	22:21	1h 04m	23:26		—:—	7h 40m		01:05*–03:22*	2h 17m	M _\ bis ND ₋	Mo, 10. Jun
Di, 11. Jun	MESZ			Astr. MD		09:58	01:05	—:—		03:22	1h 04m	04:27	47m	05:14	16h 19m	21:34	47m	22:22	1h 04m	23:27		—:—	7h 39m		01:23*–03:22*	1h 58m	M _\ bis ND ₋	Di, 11. Jun
Mi, 12. Jun	MESZ			Astr. MD		11:11	01:23	—:—		03:22	1h 04m	04:27	47m	05:14	16h 20m	21:35	47m	22:23	1h 05m	23:28		—:—	7h 39m		01:37*–03:21*	1h 44m	M _\ bis ND ₋	Mi, 12. Jun
Do, 13. Jun	MESZ			Astr. MD		12:21	01:37	—:—		03:21	1h 05m	04:26	47m	05:14	16h 21m	21:35	47m	22:23	1h 05m	23:29		—:—	7h 38m		01:48*–03:21*	1h 32m	M _\ bis ND ₋	Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	☾	13:29	01:48	—:—		03:21	1h 05m	04:26	47m	05:14	16h 22m	21:36	47m	22:24	1h 05m	23:30		—:—	7h 37m		01:59*–03:20*	1h 20m	M _\ bis ND ₋	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:37	01:59	—:—		03:20	1h 05m	04:26	47m	05:14	16h 22m	21:36	47m	22:24	1h 05m	23:30		—:—	7h 37m		02:10*–03:20*	1h 09m	M _\ bis ND ₋	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		15:46	02:10	—:—		03:20	1h 05m	04:26	47m	05:14	16h 23m	21:37	47m	22:25	1h 05m	23:31		—:—	7h 36m		02:23*–03:20*	57m	M _\ bis ND ₋	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		16:58	02:23	—:—		03:20	1h 05m	04:26	47m	05:14	16h 23m	21:37	47m	22:25	1h 06m	23:31		—:—	7h 36m		02:37*–03:20*	42m	M _\ bis ND ₋	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		18:12	02:37	—:—		03:20	1h 06m	04:26	47m	05:14	16h 23m	21:38	48m	22:26	1h 06m	23:32		—:—	7h 36m		02:56*–03:20*	23m	M _\ bis ND ₋	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:29	02:56	—:—		03:20	1h 06m	04:26	48m	05:14	16h 24m	21:38	48m	22:26	1h 06m	23:32		—:—	7h 36m		—:—:—:—	–	Mond stört	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		20:46	03:21	—:—		03:20	1h 06m	04:26	48m	05:14	16h 24m	21:38	48m	22:26	1h 06m	23:32		—:—	7h 36m		—:—:—:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		21:55	03:58	—:—		03:20	1h 06m	04:26	48m	05:14	16h 24m	21:38	48m	22:26	1h 06m	23:33		—:—	7h 36m		—:—:—:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	☉	22:52	04:49	—:—		03:20	1h 06m	04:27	48m	05:15	16h 23m	21:39	48m	22:27	1h 06m	23:33		—:—	7h 36m		—:—:—:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:34	05:57	—:—		03:21	1h 06m	04:27	48m	05:15	16h 23m	21:39	47m	22:27	1h 06m	23:33		—:—	7h 36m		23:33–23:34	0m	ND ₊ bis M ₇	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		—:—	07:18	—:—		03:21	1h 06m	04:27	47m	05:15	16h 23m	21:39	47m	22:27	1h 05m	23:33		—:—	7h 36m		23:33–00:04*	31m	ND ₊ bis M ₇	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		00:04	08:45	—:—		03:22	1h 05m	04:28	47m	05:16	16h 23m	21:39	47m	22:27	1h 05m	23:32		—:—	7h 37m		23:32–00:26*	53m	ND ₊ bis M ₇	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:26	10:12	—:—		03:22	1h 05m	04:28	47m	05:16	16h 22m	21:39	47m	22:26	1h 05m	23:32		—:—	7h 37m		23:32–00:43*	1h 10m	ND ₊ bis M ₇	Mi, 26. Jun
Do, 27. Jun	MESZ			Astr. MD		00:43	11:37	—:—		03:23	1h 05m	04:29	47m	05:16	16h 22m	21:39	47m	22:26	1h 05m	23:32		—:—	7h 38m		23:32–00:58*	1h 25m	ND ₊ bis M ₇	Do, 27. Jun
Fr, 28. Jun	MESZ			Astr. MD	☾	00:58	13:00	—:—		03:24	1h 05m	04:29	47m	05:17	16h 21m	21:38	47m	22:26	1h 05m	23:31		—:—	7h 39m		23:31–01:11*	1h 40m	ND ₊ bis M ₇	Fr, 28. Jun
Sa, 29. Jun	MESZ			Astr. MD		01:11	14:23	—:—		03:25	1h 05m	04:30	47m	05:18	16h 20m	21:38	47m	22:26	1h 04m	23:31		—:—	7h 39m		23:31–01:26*	1h 55m	ND ₊ bis M ₇	Sa, 29. Jun
So, 30. Jun	MESZ			Astr. MD		01:26	15:47	—:—		03:26	1h 04m	04:31	47m	05:18	16h 19m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 40m		23:30–01:43*	2h 12m	ND ₊ bis M ₇	So, 30. Jun
Mo, 1. Jul	MESZ			Astr. MD		01:43	17:12	—:—		03:27	1h 04m	04:31	47m	05:19	16h 18m	21:38	47m	22:25	1h 04m	23:29		—:—	7h 41m		23:29–02:04*	2h 34m	ND ₊ bis M ₇	Mo, 1. Jul
Di, 2. Jul	MESZ			Astr. MD		02:04	18:37	—:—		03:28	1h 04m	04:32	47m	05:19	16h 17m	21:37	47m	22:25	1h 03m	23:29		—:—	7h 42m		23:29–02:32*	3h 03m	ND ₊ bis M ₇	Di, 2. Jul
Mi, 3. Jul	MESZ			Astr. MD		02:32	19:57	—:—		03:29	1h 03m	04:33	47m	05:20	16h 16m	21:37	47m	22:24	1h 03m	23:28		—:—	7h 44m		23:28–03:10*	3h 42m	ND ₊ bis M ₇	Mi, 3. Jul
Do, 4. Jul	MESZ			Astr. MD		03:10	21:07	—:—		03:30	1h 03m	04:34	47m	05:21	16h 15m	21:36	46m	22:23	1h 03m	23:27		—:—	7h 45m		23:27–03:32*	4h 04m	ND ₊ bis ND ₋	Do, 4. Jul
Fr, 5. Jul	MESZ			Astr. MD		04:03	22:01	—:—		03:32	1h 03m	04:35	46m	05:22	16h 14m	21:36	46m	22:23	1h 02m	23:26		—:—	7h 46m		23:26–03:33*	4h 07m	ND ₊ bis ND ₋	Fr, 5. Jul
Sa, 6. Jul	MESZ			Astr. MD	☀	05:09	22:39	—:—		03:33	1h 02m	04:36	46m	05:23	16h 12m	21:35	46m	22:22	1h 02m	23:25		—:—	7h 47m		23:25–03:34*	4h 09m	ND ₊ bis ND ₋	Sa, 6. Jul
So, 7. Jul	MESZ			Astr. MD		06:23	23:07	—:—		03:34	1h 02m	04:37	46m	05:23	16h 11m	21:35	46m	22:21	1h 02m	23:23		—:—	7h 49m		23:23–03:36*	4h 12m	ND ₊ bis ND ₋	So, 7. Jul
Mo, 8. Jul	MESZ			Astr. MD		07:39	23:27	—:—		03:36	1h 02m	04:38	46m	05:24	16h 09m	21:34	46m	22:21	1h 01m	23:22		—:—	7h 51m		23:27–03:37*	4h 10m	M _\ bis ND ₋	Mo, 8. Jul
Di, 9. Jul	MESZ			Astr. MD		08:54	23:42	—:—		03:37	1h 01m	04:39	46m	05:25	16h 08m	21:34	46m	22:20	1h 01m	23:21		—:—	7h 52m		23:42–03:39*	3h 57m	M _\ bis ND ₋	Di, 9. Jul
Mi, 10. Jul	MESZ			Astr. MD		10:06	23:55	—:—		03:39	1h 01m	04:40	46m	05:26	16h 06m	21:33	45m	22:19	1h 00m	23:20		—:—	7h 54m		23:55–03:41*	3h 46m	M _\ bis ND ₋	Mi, 10. Jul
Do, 11. Jul	MESZ			Astr. MD		11:15	—:—	—:—		03:41	1h 00m	04:41	45m	05:27	16h 04m	21:32	45m	22:18	1h 00m	23:18		—:—	7h 56m		00:06*–03:42*	3h 36m	M _\ bis ND ₋	Do, 11. Jul
Fr, 12. Jul	MESZ			Astr. MD		12:23	00:06	—:—		03:42	1h 00m																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Fr, 19. Jul	MESZ	—:—:—:—	—	Mond stört		20:41	02:35	02:21	1h 34m	03:55	56m	04:52	44m	05:36	15h 48m	21:25	44m	22:09	56m	23:05	1h 31m	00:36*	8h 13m	1h 49m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—	—	Mond stört		21:29	03:37	02:26	1h 31m	03:57	56m	04:53	44m	05:38	15h 45m	21:23	43m	22:07	55m	23:03	1h 28m	00:31*	8h 15m	1h 59m				Sa, 20. Jul
So, 21. Jul	MESZ	—:—:—:—	—	Mond stört	○	22:04	04:54	02:31	1h 28m	03:59	55m	04:55	43m	05:39	15h 43m	21:22	43m	22:06	55m	23:01	1h 25m	00:27*	8h 17m	2h 08m				So, 21. Jul
Mo, 22. Jul	MESZ	—:—:~:~:~	—	Mond stört		22:29	06:22	02:35	1h 25m	04:01	55m	04:56	43m	05:40	15h 40m	21:21	43m	22:04	54m	22:59	1h 23m	00:23*	8h 20m	2h 17m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:48	07:52	02:40	1h 23m	04:03	54m	04:58	43m	05:41	15h 38m	21:20	43m	22:03	54m	22:57	1h 21m	00:18*	8h 22m	2h 25m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:04	09:20	02:44	1h 21m	04:05	54m	04:59	43m	05:43	15h 35m	21:18	42m	22:01	53m	22:55	1h 19m	00:14*	8h 25m	2h 33m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:18	10:46	02:48	1h 19m	04:07	53m	05:01	42m	05:44	15h 33m	21:17	42m	22:00	53m	22:53	1h 17m	00:10*	8h 28m	2h 41m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:33	12:11	02:52	1h 17m	04:09	53m	05:03	42m	05:45	15h 30m	21:16	42m	21:58	52m	22:51	1h 15m	00:06*	8h 30m	2h 49m				Fr, 26. Jul
Sa, 27. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:48	13:35	02:56	1h 15m	04:11	52m	05:04	42m	05:47	15h 27m	21:14	42m	21:57	52m	22:49	1h 13m	00:03*	8h 33m	2h 57m				Sa, 27. Jul
So, 28. Jul	MESZ	23:59–00:08*	8m	AN ₊ bis M ₇	●	—:—	15:00	03:00	1h 13m	04:13	52m	05:06	42m	05:48	15h 24m	21:13	42m	21:55	51m	22:47	1h 12m	23:59	8h 36m	3h 04m				So, 28. Jul
Mo, 29. Jul	MESZ	23:55–00:33*	37m	AN ₊ bis M ₇		00:08	16:25	03:03	1h 12m	04:15	51m	05:07	42m	05:49	15h 22m	21:12	41m	21:53	51m	22:45	1h 10m	23:55	8h 39m	3h 11m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:52–01:08*	1h 15m	AN ₊ bis M ₇		00:33	17:46	03:07	1h 10m	04:18	51m	05:09	41m	05:51	15h 19m	21:10	41m	21:52	50m	22:43	1h 09m	23:52	8h 42m	3h 18m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:48–01:55*	2h 06m	AN ₊ bis M ₇		01:08	18:59	03:11	1h 09m	04:20	50m	05:11	41m	05:52	15h 16m	21:08	41m	21:50	50m	22:40	1h 07m	23:48	8h 45m	3h 25m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:45–02:56*	3h 11m	AN ₊ bis M ₇		01:55	19:57	03:14	1h 07m	04:22	50m	05:12	41m	05:54	15h 13m	21:07	41m	21:48	50m	22:38	1h 06m	23:45	8h 48m	3h 32m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:41–03:21*	3h 39m	AN ₊ bis AN ₋		02:56	20:39	03:17	1h 06m	04:24	50m	05:14	41m	05:55	15h 10m	21:05	40m	21:46	49m	22:36	1h 05m	23:41	8h 51m	3h 39m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:38–03:24*	3h 46m	AN ₊ bis AN ₋		04:07	21:10	03:21	1h 05m	04:26	49m	05:16	40m	05:56	15h 07m	21:04	40m	21:44	49m	22:34	1h 04m	23:38	8h 54m	3h 46m				Sa, 3. Aug
So, 4. Aug	MESZ	23:34–03:27*	3h 52m	AN ₊ bis AN ₋	●	05:23	21:32	03:24	1h 04m	04:28	49m	05:17	40m	05:58	15h 04m	21:02	40m	21:43	48m	22:31	1h 02m	23:34	8h 57m	3h 52m				So, 4. Aug
Mo, 5. Aug	MESZ	23:31–03:30*	3h 59m	AN ₊ bis AN ₋		06:38	21:48	03:27	1h 02m	04:30	48m	05:19	40m	05:59	15h 01m	21:00	40m	21:41	48m	22:29	1h 01m	23:31	9h 00m	3h 59m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:28–03:33*	4h 05m	AN ₊ bis AN ₋		07:51	22:01	03:30	1h 01m	04:32	48m	05:21	40m	06:01	14h 58m	20:59	40m	21:39	48m	22:27	1h 00m	23:28	9h 03m	4h 05m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:24–03:36*	4h 11m	AN ₊ bis AN ₋		09:01	22:13	03:33	1h 00m	04:34	48m	05:22	40m	06:02	14h 54m	20:57	39m	21:37	47m	22:25	59m	23:24	9h 06m	4h 11m				Mi, 7. Aug
Do, 8. Aug	MESZ	23:21–03:39*	4h 18m	AN ₊ bis AN ₋		10:10	22:24	03:36	59m	04:36	47m	05:24	39m	06:04	14h 51m	20:55	39m	21:35	47m	22:22	58m	23:21	9h 09m	4h 18m				Do, 8. Aug
Fr, 9. Aug	MESZ	23:18–03:42*	4h 24m	AN ₊ bis AN ₋		11:17	22:35	03:39	58m	04:38	47m	05:26	39m	06:05	14h 48m	20:54	39m	21:33	46m	22:20	58m	23:18	9h 13m	4h 24m				Fr, 9. Aug
Sa, 10. Aug	MESZ	23:15–03:45*	4h 30m	AN ₊ bis AN ₋		12:26	22:47	03:42	58m	04:40	46m	05:27	39m	06:07	14h 45m	20:52	39m	21:31	46m	22:18	57m	23:15	9h 16m	4h 30m				Sa, 10. Aug
So, 11. Aug	MESZ	23:11–03:48*	4h 36m	AN ₊ bis AN ₋		13:37	23:01	03:45	57m	04:42	46m	05:29	39m	06:08	14h 41m	20:50	39m	21:29	46m	22:15	56m	23:11	9h 19m	4h 36m				So, 11. Aug
Mo, 12. Aug	MESZ	23:20–03:51*	4h 30m	M _\ bis AN ₋	◐	14:50	23:20	03:48	56m	04:44	46m	05:31	39m	06:10	14h 38m	20:48	38m	21:27	45m	22:13	55m	23:08	9h 22m	4h 42m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:46–03:54*	4h 07m	M _\ bis AN ₋		16:05	23:46	03:51	55m	04:46	45m	05:32	38m	06:11	14h 35m	20:46	38m	21:25	45m	22:10	54m	23:05	9h 26m	4h 48m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:23*–03:56*	3h 33m	M _\ bis AN ₋		17:19	—:—	03:54	54m	04:48	45m	05:34	38m	06:13	14h 31m	20:44	38m	21:23	45m	22:08	54m	23:02	9h 29m	4h 54m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:16*–03:59*	2h 43m	M _\ bis AN ₋		18:26	00:23	03:56	54m	04:50	45m	05:36	38m	06:14	14h 28m	20:43	38m	21:21	44m	22:06	53m	22:59	9h 32m	5h 00m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:26*–04:02*	1h 35m	M _\ bis AN ₋		19:20	01:16	03:59	53m	04:52	44m	05:37	38m	06:16	14h 25m	20:41	38m	21:19	44m	22:03	52m	22:56	9h 36m	5h 05m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:50*–04:04*	14m	M _\ bis AN ₋		20:00	02:26	04:02	52m	04:54	44m	05:39	38m	06:17	14h 21m	20:39	37m	21:17	44m	22:01	52m	22:53	9h 39m	5h 11m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:30	03:50	04:04	52m	04:56	44m	05:41	37m	06:19	14h 18m	20:37	37m	21:15	43m	21:58	51m	22:50	9h 43m	5h 17m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~:~	—	Mond stört	○	20:51	05:20	04:07	51m	04:58	43m	05:42	37m	06:20	14h 14m	20:35	37m	21:12	43m	21:56	50m	22:47	9h 46m	5h 22m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:09	06:51	04:10	50m	05:00	43m	05:44	37m	06:22	14h 11m	20:33	37m	21:10	43m	21:53	50m	22:44	9h 50m	5h 28m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:24	08:21	04:12	50m	05:02	43m	05:46	37m	06:23	14h 07m	20:31	37m	21:08	42m	21:51	49m	22:41	9h 53m	5h 33m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:38	09:49	04:15	49m	05:04	42m	05:47	37m	06:25	14h 04m	20:29	37m	21:06	42m	21:49	49m	22:38	9h 57m	5h 39m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:54	11:17	04:17	49m	05:06	42m	05:49	37m	06:26	14h 00m	20:27	36m	21:04	42m	21:46	48m	22:35	10h 00m	5h 44m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:12	12:44	04:19	48m	05:08	42m	05:51	36m	06:28	13h 57m	20:25	36m	21:02	42m	21:44	48m	22:32	10h 04m	5h 49m				Sa, 24. Aug
So, 25. Aug	MESZ	22:29–22:36	6m	AN ₊ bis M ₇		22:36	14:12	04:22	48m	05:10	42m	05:52	36m	06:29	13h 53m	20:23	36m	20:59	41m	21:41	47m	22:29	10h 07m	5h 55m				So, 25. Aug
Mo, 26. Aug	MESZ	22:26–23:07	41m	AN ₊ bis M ₇	◐	23:07	15:36	04:24	47m	05:12	41m	05:54	36m	06:31	13h 50m	20:21	36m	20:57	41m	21:39	47m	22:26	10h 11m	6h 00m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:23–23:51	1h 27m	AN ₊ bis M ₇		23:51	16:52	04:27	47m	05:14	41m	05:55	36m	06:32	13h 46m	20:19	36m	20:55	41m	21:36	46m	22:23	10h 14m	6h 05m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:20–00:47*	2h 27m	AN ₊ bis M ₇		—:—	17:55	04:29	46m	05:16	41m	05:57	36m	06:33	13h 42m	20:16	36m	20:53	41m	21:34	46m	22:20	10h 18m	6h 10m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:17–01:56*	3h 38m	AN ₊ bis M ₇		00:47	18:41	04:31	46m	05:17	41m	05:59	36m	06:35	13h 39m	20:14	36m	20:51	40m	21:31	45m	22:17	10h 22m	6h 16m				Do, 29. Aug
Fr, 30. Aug	MESZ	22:15–03:10*	4h 55m	AN ₊ bis M ₇																								

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Sa, 7. Sep	MESZ	21:52 – 04:53*	7h 00m	AN ₊ bis AN ₋		11:24	21:07	04:51	43m	05:34	39m	06:13	35m	06:48	13h 06m	19:55	35m	20:30	39m	21:09	42m	21:52	10h 54m	7h 00m					Sa, 7. Sep
So, 8. Sep	MESZ	21:50 – 04:55*	7h 05m	AN ₊ bis AN ₋		12:36	21:24	04:53	42m	05:35	39m	06:15	35m	06:50	13h 02m	19:53	35m	20:28	39m	21:07	42m	21:50	10h 58m	7h 05m					So, 8. Sep
Mo, 9. Sep	MESZ	21:47 – 04:57*	7h 09m	AN ₊ bis AN ₋		13:49	21:46	04:55	42m	05:37	39m	06:16	35m	06:51	12h 59m	19:51	35m	20:26	38m	21:05	42m	21:47	11h 02m	7h 09m					Mo, 9. Sep
Di, 10. Sep	MESZ	22:17 – 04:59*	6h 41m	M _\ bis AN ₋		15:03	22:17	04:57	42m	05:39	38m	06:18	35m	06:53	12h 55m	19:49	34m	20:23	38m	21:02	41m	21:44	11h 05m	7h 14m					Di, 10. Sep
Mi, 11. Sep	MESZ	23:02 – 05:01*	5h 58m	M _\ bis AN ₋	☾	16:11	23:02	04:59	42m	05:41	38m	06:19	34m	06:54	12h 51m	19:46	34m	20:21	38m	21:00	41m	21:42	11h 09m	7h 19m					Mi, 11. Sep
Do, 12. Sep	MESZ	00:03* – 05:03*	5h 00m	M _\ bis AN ₋		17:10	—:—	05:01	41m	05:42	38m	06:21	34m	06:56	12h 48m	19:44	34m	20:19	38m	20:57	41m	21:39	11h 13m	7h 23m					Do, 12. Sep
Fr, 13. Sep	MESZ	01:19* – 05:04*	3h 45m	M _\ bis AN ₋		17:55	00:03	05:03	41m	05:44	38m	06:23	34m	06:57	12h 44m	19:42	34m	20:17	38m	20:55	41m	21:36	11h 17m	7h 28m					Fr, 13. Sep
Sa, 14. Sep	MESZ	02:45* – 05:06*	2h 21m	M _\ bis AN ₋		18:29	01:19	05:04	41m	05:46	38m	06:24	34m	06:59	12h 40m	19:40	34m	20:14	38m	20:53	41m	21:34	11h 20m	7h 32m					Sa, 14. Sep
So, 15. Sep	MESZ	04:15* – 05:08*	52m	M _\ bis AN ₋		18:53	02:45	05:06	41m	05:47	38m	06:26	34m	07:00	12h 37m	19:37	34m	20:12	38m	20:50	40m	21:31	11h 24m	7h 37m					So, 15. Sep
Mo, 16. Sep	MESZ	—:—:—:—	—	Mond stört		19:12	04:15	05:08	40m	05:49	38m	06:27	34m	07:02	12h 33m	19:35	34m	20:10	37m	20:48	40m	21:28	11h 28m	7h 41m					Mo, 16. Sep
Di, 17. Sep	MESZ	—:—:—:—	—	Mond stört		19:28	05:46	05:10	40m	05:51	38m	06:29	34m	07:03	12h 29m	19:33	34m	20:08	37m	20:45	40m	21:26	11h 31m	7h 46m					Di, 17. Sep
Mi, 18. Sep	MESZ	—:—:—:—	—	Mond stört	☾	19:43	07:16	05:12	40m	05:52	37m	06:30	34m	07:05	12h 25m	19:31	34m	20:05	37m	20:43	40m	21:23	11h 35m	7h 50m					Mi, 18. Sep
Do, 19. Sep	MESZ	—:~:~:~:~	—	Mond stört		19:58	08:46	05:14	40m	05:54	37m	06:32	34m	07:06	12h 22m	19:29	34m	20:03	37m	20:41	40m	21:21	11h 39m	7h 54m					Do, 19. Sep
Fr, 20. Sep	MESZ	—:~:~:~:~	—	Mond stört		20:15	10:17	05:16	40m	05:56	37m	06:33	34m	07:08	12h 18m	19:26	34m	20:01	37m	20:38	39m	21:18	11h 43m	7h 59m					Fr, 20. Sep
Sa, 21. Sep	MESZ	—:~:~:~:~	—	Mond stört		20:37	11:48	05:17	39m	05:57	37m	06:35	34m	07:09	12h 14m	19:24	34m	19:59	37m	20:36	39m	21:16	11h 46m	8h 03m					Sa, 21. Sep
So, 22. Sep	MESZ	—:~:~:~:~	—	Mond stört		21:06	13:18	05:19	39m	05:59	37m	06:37	34m	07:11	12h 11m	19:22	34m	19:56	37m	20:34	39m	21:13	11h 50m	8h 07m					So, 22. Sep
Mo, 23. Sep	MESZ	21:11 – 21:46	35m	AN ₊ bis M ₇		21:46	14:40	05:21	39m	06:01	37m	06:38	34m	07:12	12h 07m	19:20	34m	19:54	37m	20:31	39m	21:11	11h 54m	8h 12m					Mo, 23. Sep
Di, 24. Sep	MESZ	21:08 – 22:40	1h 31m	AN ₊ bis M ₇	☾	22:40	15:49	05:23	39m	06:02	37m	06:40	34m	07:14	12h 03m	19:18	34m	19:52	37m	20:29	39m	21:08	11h 57m	8h 16m					Di, 24. Sep
Mi, 25. Sep	MESZ	21:06 – 23:46	2h 39m	AN ₊ bis M ₇		23:46	16:41	05:25	39m	06:04	37m	06:41	34m	07:15	11h 59m	19:15	34m	19:50	37m	20:27	39m	21:06	12h 01m	8h 20m					Mi, 25. Sep
Do, 26. Sep	MESZ	21:03 – 00:59*	3h 55m	AN ₊ bis M ₇		—:—	17:18	05:26	39m	06:05	37m	06:43	34m	07:17	11h 56m	19:13	34m	19:47	37m	20:25	38m	21:03	12h 05m	8h 24m					Do, 26. Sep
Fr, 27. Sep	MESZ	21:01 – 02:14*	5h 13m	AN ₊ bis M ₇		00:59	17:44	05:28	39m	06:07	37m	06:44	34m	07:19	11h 52m	19:11	34m	19:45	37m	20:22	38m	21:01	12h 09m	8h 28m					Fr, 27. Sep
Sa, 28. Sep	MESZ	20:59 – 03:28*	6h 29m	AN ₊ bis M ₇		02:14	18:03	05:30	38m	06:09	37m	06:46	34m	07:20	11h 48m	19:09	34m	19:43	36m	20:20	38m	20:59	12h 12m	8h 32m					Sa, 28. Sep
So, 29. Sep	MESZ	20:56 – 04:39*	7h 42m	AN ₊ bis M ₇		03:28	18:18	05:31	38m	06:10	37m	06:47	34m	07:22	11h 45m	19:07	34m	19:41	36m	20:18	38m	20:56	12h 16m	8h 36m					So, 29. Sep
Mo, 30. Sep	MESZ	20:54 – 05:35*	8h 40m	AN ₊ bis AN ₋		04:39	18:30	05:33	38m	06:12	37m	06:49	34m	07:23	11h 41m	19:04	34m	19:39	36m	20:16	38m	20:54	12h 20m	8h 40m					Mo, 30. Sep
Di, 1. Okt	MESZ	20:52 – 05:37*	8h 44m	AN ₊ bis AN ₋		05:48	18:41	05:35	38m	06:13	36m	06:50	34m	07:25	11h 37m	19:02	34m	19:36	36m	20:13	38m	20:52	12h 23m	8h 44m					Di, 1. Okt
Mi, 2. Okt	MESZ	20:49 – 05:38*	8h 48m	AN ₊ bis AN ₋	☾	06:56	18:51	05:37	38m	06:15	36m	06:52	34m	07:26	11h 33m	19:00	34m	19:34	36m	20:11	38m	20:49	12h 27m	8h 48m					Mi, 2. Okt
Do, 3. Okt	MESZ	20:47 – 05:40*	8h 52m	AN ₊ bis AN ₋		08:04	19:02	05:38	38m	06:17	36m	06:53	34m	07:28	11h 30m	18:58	34m	19:32	36m	20:09	38m	20:47	12h 31m	8h 52m					Do, 3. Okt
Fr, 4. Okt	MESZ	20:45 – 05:41*	8h 56m	AN ₊ bis AN ₋		09:14	19:15	05:40	38m	06:18	36m	06:55	34m	07:29	11h 26m	18:56	34m	19:30	36m	20:07	38m	20:45	12h 35m	8h 56m					Fr, 4. Okt
Sa, 5. Okt	MESZ	20:43 – 05:43*	9h 00m	AN ₊ bis AN ₋		10:25	19:30	05:41	38m	06:20	36m	06:57	34m	07:31	11h 22m	18:54	34m	19:28	36m	20:05	38m	20:43	12h 38m	9h 00m					Sa, 5. Okt
So, 6. Okt	MESZ	20:40 – 05:45*	9h 04m	AN ₊ bis AN ₋		11:38	19:51	05:43	38m	06:21	36m	06:58	34m	07:32	11h 19m	18:51	34m	19:26	36m	20:03	37m	20:40	12h 42m	9h 04m					So, 6. Okt
Mo, 7. Okt	MESZ	20:38 – 05:46*	9h 08m	AN ₊ bis AN ₋		12:51	20:18	05:45	38m	06:23	36m	07:00	34m	07:34	11h 15m	18:49	34m	19:24	36m	20:00	37m	20:38	12h 46m	9h 08m					Mo, 7. Okt
Di, 8. Okt	MESZ	20:57 – 05:48*	8h 51m	M _\ bis AN ₋		14:01	20:57	05:46	37m	06:24	36m	07:01	34m	07:36	11h 11m	18:47	34m	19:22	36m	19:58	37m	20:36	12h 49m	9h 11m					Di, 8. Okt
Mi, 9. Okt	MESZ	21:50 – 05:50*	7h 59m	M _\ bis AN ₋		15:02	21:50	05:48	37m	06:26	36m	07:03	34m	07:37	11h 07m	18:45	34m	19:20	36m	19:56	37m	20:34	12h 53m	9h 15m					Mi, 9. Okt
Do, 10. Okt	MESZ	22:58 – 05:51*	6h 52m	M _\ bis AN ₋	☾	15:51	22:58	05:50	37m	06:27	36m	07:04	34m	07:39	11h 04m	18:43	34m	19:17	36m	19:54	37m	20:32	12h 57m	9h 19m					Do, 10. Okt
Fr, 11. Okt	MESZ	00:18* – 05:53*	5h 34m	M _\ bis AN ₋		16:28	—:—	05:51	37m	06:29	36m	07:06	34m	07:40	11h 00m	18:41	34m	19:15	36m	19:52	37m	20:30	13h 00m	9h 23m					Fr, 11. Okt
Sa, 12. Okt	MESZ	01:44* – 05:54*	4h 10m	M _\ bis AN ₋		16:54	00:18	05:53	37m	06:31	36m	07:07	34m	07:42	10h 56m	18:39	34m	19:13	36m	19:50	37m	20:28	13h 04m	9h 26m					Sa, 12. Okt
So, 13. Okt	MESZ	03:12* – 05:56*	2h 44m	M _\ bis AN ₋		17:15	01:44	05:54	37m	06:32	36m	07:09	34m	07:43	10h 53m	18:37	34m	19:11	36m	19:48	37m	20:26	13h 08m	9h 30m					So, 13. Okt
Mo, 14. Okt	MESZ	04:40* – 05:57*	1h 17m	M _\ bis AN ₋		17:32	03:12	05:56	37m	06:34	36m	07:10	34m	07:45	10h 49m	18:35	34m	19:09	36m	19:46	37m	20:24	13h 11m	9h 33m					Mo, 14. Okt
Di, 15. Okt	MESZ	—:~:~:~:~	—	Mond stört		17:46	04:40	05:57	37m	06:35	36m	07:12	34m	07:47	10h 46m	18:33	34m	19:07	36m	19:44	37m	20:22	13h 15m	9h 37m					Di, 15. Okt
Mi, 16. Okt	MESZ	—:~:~:~:~	—	Mond stört		18:01	06:09	05:59	37m	06:37	36m	07:13	34m	07:48	10h 42m	18:31	34m	19:05	36m	19:42	37m	20:20	13h 19m	9h 40m					Mi, 16. Okt
Do, 17. Okt	MESZ	—:~:~:~:~	—	Mond stört	☾	18:17	07:40	06:01	37m	06:38	36m	07:15	34m	07:50	10h 38m	18:29	34m	19:03	36m	19:40	37m	20:18	13h 22m	9h 44m					Do, 17. Okt
Fr, 18. Okt	MESZ	—:~:~:~:~	—	Mond stört		18:37	09:12	06:02	37m	06:40	36m	07:17</																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
		Δt			Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 27. Okt		19:00–02:38*	7h 38m	AN ₊ bis M _J		01:29	15:39	05:16	37m	05:53	37m	06:31	35m	07:06	10h 03m	17:09	35m	17:45	37m	18:22	37m	19:00	13h 58m	10h 17m				So, 27. Okt
Mo, 28. Okt		18:58–03:46*	8h 48m	AN ₊ bis M _J		02:38	15:50	05:17	37m	05:55	37m	06:32	35m	07:08	9h 59m	17:08	35m	17:43	37m	18:21	37m	18:58	14h 01m	10h 20m				Mo, 28. Okt
Di, 29. Okt		18:56–04:54*	9h 57m	AN ₊ bis M _J		03:46	16:00	05:19	37m	05:56	37m	06:34	35m	07:10	9h 56m	17:06	35m	17:42	37m	18:19	37m	18:56	14h 05m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:55–05:22*	10h 26m	AN ₊ bis AN ₋		04:54	16:11	05:20	37m	05:58	37m	06:35	35m	07:11	9h 52m	17:04	35m	17:40	37m	18:17	37m	18:55	14h 08m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:53–05:23*	10h 29m	AN ₊ bis AN ₋		06:03	16:23	05:22	37m	05:59	37m	06:37	36m	07:13	9h 49m	17:02	36m	17:38	37m	18:16	37m	18:53	14h 12m	10h 29m				Do, 31. Okt
Fr, 1. Nov		18:52–05:25*	10h 32m	AN ₊ bis AN ₋	●	07:14	16:38	05:23	37m	06:01	37m	06:38	36m	07:15	9h 46m	17:01	36m	17:37	37m	18:14	37m	18:52	14h 15m	10h 32m				Fr, 1. Nov
Sa, 2. Nov		18:50–05:26*	10h 35m	AN ₊ bis AN ₋		08:27	16:56	05:25	37m	06:02	37m	06:40	36m	07:16	9h 42m	16:59	36m	17:35	37m	18:13	37m	18:50	14h 18m	10h 35m				Sa, 2. Nov
So, 3. Nov		18:49–05:28*	10h 38m	AN ₊ bis AN ₋		09:40	17:22	05:26	37m	06:04	37m	06:42	36m	07:18	9h 39m	16:57	36m	17:34	37m	18:11	37m	18:49	14h 22m	10h 38m				So, 3. Nov
Mo, 4. Nov		18:48–05:29*	10h 41m	AN ₊ bis AN ₋		10:52	17:57	05:28	37m	06:05	37m	06:43	36m	07:20	9h 36m	16:56	36m	17:32	37m	18:10	37m	18:48	14h 25m	10h 41m				Mo, 4. Nov
Di, 5. Nov		18:46–05:31*	10h 44m	AN ₊ bis AN ₋		11:56	18:45	05:29	37m	06:07	37m	06:45	36m	07:21	9h 32m	16:54	36m	17:31	37m	18:09	37m	18:46	14h 28m	10h 44m				Di, 5. Nov
Mi, 6. Nov		19:48–05:32*	9h 43m	M _\ bis AN ₋		12:49	19:48	05:31	37m	06:08	37m	06:46	36m	07:23	9h 29m	16:53	36m	17:29	37m	18:07	37m	18:45	14h 32m	10h 47m				Mi, 6. Nov
Do, 7. Nov		21:03–05:33*	8h 29m	M _\ bis AN ₋		13:28	21:03	05:32	37m	06:10	37m	06:48	36m	07:25	9h 26m	16:51	36m	17:28	37m	18:06	37m	18:44	14h 35m	10h 49m				Do, 7. Nov
Fr, 8. Nov		22:25–05:35*	7h 09m	M _\ bis AN ₋		13:57	22:25	05:33	37m	06:11	38m	06:49	36m	07:26	9h 23m	16:49	36m	17:26	38m	18:04	37m	18:42	14h 38m	10h 52m				Fr, 8. Nov
Sa, 9. Nov		23:49–05:36*	5h 47m	M _\ bis AN ₋	◐	14:19	23:49	05:35	37m	06:13	38m	06:51	37m	07:28	9h 20m	16:48	37m	17:25	38m	18:03	37m	18:41	14h 41m	10h 55m				Sa, 9. Nov
So, 10. Nov		01:14*–05:38*	4h 23m	M _\ bis AN ₋		14:36	—:—	05:36	37m	06:14	38m	06:52	37m	07:30	9h 17m	16:47	37m	17:24	38m	18:02	37m	18:40	14h 44m	10h 57m				So, 10. Nov
Mo, 11. Nov		02:39*–05:39*	3h 00m	M _\ bis AN ₋		14:51	01:14	05:38	37m	06:16	38m	06:54	37m	07:31	9h 13m	16:45	37m	17:23	38m	18:01	37m	18:39	14h 47m	11h 00m				Mo, 11. Nov
Di, 12. Nov		04:05*–05:40*	1h 35m	M _\ bis AN ₋		15:05	02:39	05:39	38m	06:17	38m	06:55	37m	07:33	9h 10m	16:44	37m	17:21	38m	18:00	37m	18:38	14h 50m	11h 02m				Di, 12. Nov
Mi, 13. Nov		05:35*–05:42*	7m	M _\ bis AN ₋		15:20	04:05	05:40	38m	06:18	38m	06:57	37m	07:34	9h 07m	16:42	37m	17:20	38m	17:58	38m	18:37	14h 53m	11h 05m				Mi, 13. Nov
Do, 14. Nov		—:—:—:—	–	Mond stört		15:38	05:35	05:42	38m	06:20	38m	06:58	37m	07:36	9h 05m	16:41	37m	17:19	38m	17:57	38m	18:35	14h 56m	11h 07m				Do, 14. Nov
Fr, 15. Nov		—:—:—:—	–	Mond stört	○	16:00	07:07	05:43	38m	06:21	38m	07:00	37m	07:38	9h 02m	16:40	37m	17:18	38m	17:56	38m	18:34	14h 59m	11h 09m				Fr, 15. Nov
Sa, 16. Nov		—:—:—:—	–	Mond stört		16:31	08:40	05:44	38m	06:23	38m	07:01	38m	07:39	8h 59m	16:39	37m	17:17	38m	17:55	38m	18:34	15h 02m	11h 12m				Sa, 16. Nov
So, 17. Nov		—:—:~:~:~	–	Mond stört		17:14	10:06	05:46	38m	06:24	38m	07:03	38m	07:41	8h 56m	16:37	38m	17:16	38m	17:54	38m	18:33	15h 05m	11h 14m				So, 17. Nov
Mo, 18. Nov		—:~:~:~:~	–	Mond stört		18:13	11:18	05:47	38m	06:25	38m	07:04	38m	07:43	8h 53m	16:36	38m	17:15	38m	17:53	38m	18:32	15h 07m	11h 16m				Mo, 18. Nov
Di, 19. Nov		18:31–19:25	53m	AN ₊ bis M _J		19:25	12:11	05:48	38m	06:27	39m	07:06	38m	07:44	8h 51m	16:35	38m	17:14	38m	17:53	38m	18:31	15h 10m	11h 18m				Di, 19. Nov
Mi, 20. Nov		18:30–20:43	2h 12m	AN ₊ bis M _J		20:43	12:48	05:50	38m	06:28	39m	07:07	38m	07:46	8h 48m	16:34	38m	17:13	39m	17:52	38m	18:30	15h 13m	11h 20m				Mi, 20. Nov
Do, 21. Nov		18:29–22:00	3h 31m	AN ₊ bis M _J		22:00	13:13	05:51	38m	06:29	39m	07:09	38m	07:47	8h 45m	16:33	38m	17:12	39m	17:51	38m	18:29	15h 15m	11h 22m				Do, 21. Nov
Fr, 22. Nov		18:29–23:15	4h 46m	AN ₊ bis M _J		23:15	13:31	05:52	38m	06:31	39m	07:10	38m	07:49	8h 43m	16:32	38m	17:11	39m	17:50	38m	18:29	15h 18m	11h 24m				Fr, 22. Nov
Sa, 23. Nov		18:28–00:26*	5h 58m	AN ₊ bis M _J	◑	—:—	13:45	05:53	38m	06:32	39m	07:11	38m	07:50	8h 40m	16:31	38m	17:10	39m	17:49	38m	18:28	15h 20m	11h 26m				Sa, 23. Nov
So, 24. Nov		18:27–01:35*	7h 07m	AN ₊ bis M _J		00:26	13:57	05:55	38m	06:33	39m	07:13	39m	07:52	8h 38m	16:30	38m	17:09	39m	17:49	38m	18:27	15h 23m	11h 28m				So, 24. Nov
Mo, 25. Nov		18:27–02:43*	8h 15m	AN ₊ bis M _J		01:35	14:08	05:56	38m	06:35	39m	07:14	39m	07:53	8h 36m	16:29	39m	17:08	39m	17:48	38m	18:27	15h 25m	11h 30m				Mo, 25. Nov
Di, 26. Nov		18:26–03:51*	9h 24m	AN ₊ bis M _J		02:43	14:19	05:57	38m	06:36	39m	07:15	39m	07:55	8h 33m	16:29	39m	17:08	39m	17:47	38m	18:26	15h 27m	11h 32m				Di, 26. Nov
Mi, 27. Nov		18:26–05:01*	10h 35m	AN ₊ bis M _J		03:51	14:31	05:58	38m	06:37	39m	07:17	39m	07:56	8h 31m	16:28	39m	17:07	39m	17:47	38m	18:26	15h 29m	11h 33m				Mi, 27. Nov
Do, 28. Nov		18:25–06:01*	11h 35m	AN ₊ bis AN ₋		05:01	14:44	05:59	38m	06:38	39m	07:18	39m	07:58	8h 29m	16:27	39m	17:07	39m	17:46	38m	18:25	15h 31m	11h 35m				Do, 28. Nov
Fr, 29. Nov		18:25–06:02*	11h 37m	AN ₊ bis AN ₋		06:13	15:02	06:01	38m	06:40	39m	07:19	39m	07:59	8h 27m	16:26	39m	17:06	39m	17:46	38m	18:25	15h 33m	11h 37m				Fr, 29. Nov
Sa, 30. Nov		18:24–06:03*	11h 38m	AN ₊ bis AN ₋		07:27	15:25	06:02	38m	06:41	39m	07:21	39m	08:00	8h 25m	16:26	39m	17:05	39m	17:45	38m	18:24	15h 35m	11h 38m				Sa, 30. Nov
So, 1. Dez		18:24–06:04*	11h 39m	AN ₊ bis AN ₋	●	08:40	15:57	06:03	38m	06:42	39m	07:22	39m	08:02	8h 23m	16:25	39m	17:05	39m	17:45	38m	18:24	15h 37m	11h 39m				So, 1. Dez
Mo, 2. Dez		18:24–06:05*	11h 41m	AN ₊ bis AN ₋		09:48	16:42	06:04	39m	06:43	40m	07:23	39m	08:03	8h 21m	16:25	39m	17:05	40m	17:45	39m	18:24	15h 39m	11h 41m				Mo, 2. Dez
Di, 3. Dez		18:23–06:06*	11h 42m	AN ₊ bis AN ₋		10:45	17:41	06:05	39m	06:44	40m	07:24	40m	08:04	8h 20m	16:24	39m	17:04	40m	17:44	39m	18:23	15h 41m	11h 42m				Di, 3. Dez
Mi, 4. Dez		18:54–06:07*	11h 13m	M _\ bis AN ₋		11:29	18:54	06:06	39m	06:45	40m	07:25	40m	08:05	8h 18m	16:24	40m	17:04	40m	17:44	39m	18:23	15h 42m	11h 43m				Mi, 4. Dez
Do, 5. Dez		20:14–06:08*	9h 54m	M _\ bis AN ₋		12:00	20:14	06:07	39m	06:46	40m	07:26	40m	08:07	8h 16m	16:23	40m	17:04	40m	17:44	39m	18:23	15h 44m	11h 44m				Do, 5. Dez
Fr, 6. Dez		21:37–06:09*	8h 32m	M _\ bis AN ₋		12:24	21:37	06:08	39m	06:47	40m	07:28	40m	08:08	8h 15m	16:23	40m	17:03	40m	17:44	39m	18:23	15h 45m	11h 46m				Fr, 6. Dez
Sa, 7. Dez		22:59–06:10*	7h 10m	M _\ bis AN ₋		12:42	22:59	06:09	39m	06:48	40m	07:29	40m	08:09	8h 13m	16:23	40m	17:03	40m	17:44	39m	18:23	15h 47m	11h 47m				Sa, 7. Dez
So, 8. Dez		00:21*–06:11*	5h 49m	M _\ bis AN ₋	◒	12:57</																						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024/25	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024/25		
			Δt		Ph.	\uparrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 16. Dez		—:—:—:—	—	Mond stört		17:00	09:57	06:16	39m	06:56	40m	07:37	40m	08:17	8h 05m	16:23	40m	17:04	40m	17:45	39m	18:24	15h 55m	11h 53m				Mo, 16. Dez
Di, 17. Dez		—:—:—:—	—	Mond stört		18:17	10:42	06:17	39m	06:56	40m	07:37	40m	08:18	8h 05m	16:23	40m	17:04	40m	17:45	39m	18:24	15h 55m	11h 53m				Di, 17. Dez
Mi, 18. Dez		18:25–19:38	1h 12m	AN ₊ bis M ₇		19:38	11:12	06:18	39m	06:57	40m	07:38	40m	08:19	8h 04m	16:24	40m	17:04	40m	17:45	39m	18:25	15h 55m	11h 53m				Mi, 18. Dez
Do, 19. Dez		18:25–20:55	2h 30m	AN ₊ bis M ₇		20:55	11:34	06:18	39m	06:58	40m	07:38	40m	08:19	8h 04m	16:24	40m	17:05	40m	17:46	39m	18:25	15h 56m	11h 53m				Do, 19. Dez
Fr, 20. Dez		18:26–22:09	3h 43m	AN ₊ bis M ₇		22:09	11:50	06:19	39m	06:58	40m	07:39	40m	08:20	8h 04m	16:24	40m	17:05	40m	17:46	39m	18:26	15h 56m	11h 53m				Fr, 20. Dez
Sa, 21. Dez		18:26–23:20	4h 54m	AN ₊ bis M ₇		23:20	12:03	06:19	39m	06:59	40m	07:40	40m	08:21	8h 04m	16:25	40m	17:06	40m	17:47	39m	18:26	15h 56m	11h 53m				Sa, 21. Dez
So, 22. Dez		18:27–00:29*	6h 02m	AN ₊ bis M ₇	☾	—:—	12:14	06:20	39m	06:59	40m	07:40	40m	08:21	8h 04m	16:25	40m	17:06	40m	17:47	39m	18:27	15h 56m	11h 53m				So, 22. Dez
Mo, 23. Dez		18:27–01:37*	7h 09m	AN ₊ bis M ₇		00:29	12:25	06:20	39m	07:00	40m	07:40	40m	08:21	8h 04m	16:26	40m	17:07	40m	17:48	39m	18:27	15h 55m	11h 53m				Mo, 23. Dez
Di, 24. Dez		18:28–02:46*	8h 17m	AN ₊ bis M ₇		01:37	12:37	06:21	39m	07:00	40m	07:41	40m	08:22	8h 04m	16:27	40m	17:08	40m	17:48	39m	18:28	15h 55m	11h 53m				Di, 24. Dez
Mi, 25. Dez		18:28–03:57*	9h 28m	AN ₊ bis M ₇		02:46	12:49	06:21	39m	07:01	40m	07:41	40m	08:22	8h 05m	16:27	40m	17:08	40m	17:49	39m	18:28	15h 55m	11h 52m				Mi, 25. Dez
Do, 26. Dez		18:29–05:10*	10h 40m	AN ₊ bis M ₇		03:57	13:05	06:21	39m	07:01	40m	07:42	40m	08:22	8h 05m	16:28	40m	17:09	40m	17:50	39m	18:29	15h 54m	11h 52m				Do, 26. Dez
Fr, 27. Dez		18:30–06:22*	11h 52m	AN ₊ bis AN ₋		05:10	13:26	06:22	39m	07:01	40m	07:42	40m	08:23	8h 06m	16:29	40m	17:10	40m	17:50	39m	18:30	15h 53m	11h 52m				Fr, 27. Dez
Sa, 28. Dez		18:31–06:22*	11h 51m	AN ₊ bis AN ₋		06:24	13:54	06:22	39m	07:01	40m	07:42	40m	08:23	8h 06m	16:30	40m	17:10	40m	17:51	39m	18:31	15h 53m	11h 51m				Sa, 28. Dez
So, 29. Dez		18:31–06:22*	11h 51m	AN ₊ bis AN ₋		07:35	14:34	06:22	39m	07:02	40m	07:42	40m	08:23	8h 07m	16:31	40m	17:11	40m	17:52	39m	18:31	15h 52m	11h 51m				So, 29. Dez
Mo, 30. Dez		18:32–06:22*	11h 50m	AN ₊ bis AN ₋	☉	08:37	15:30	06:22	39m	07:02	40m	07:42	40m	08:23	8h 08m	16:31	40m	17:12	40m	17:53	39m	18:32	15h 51m	11h 50m				Mo, 30. Dez
Di, 31. Dez		18:33–06:23*	11h 49m	AN ₊ bis AN ₋		09:26	16:40	06:22	39m	07:02	40m	07:42	40m	08:23	8h 09m	16:32	40m	17:13	40m	17:54	39m	18:33	15h 50m	11h 49m				Di, 31. Dez
Mi, 1. Jan		18:34–06:23*	11h 48m	AN ₊ bis AN ₋		10:02	18:00	06:23	39m	07:02	40m	07:42	40m	08:23	8h 10m	16:33	40m	17:14	40m	17:55	39m	18:34	15h 49m	11h 48m				Mi, 1. Jan
Do, 2. Jan		19:24–06:23*	10h 58m	M _\ bis AN ₋		10:28	19:24	06:23	39m	07:02	40m	07:42	40m	08:23	8h 11m	16:34	40m	17:15	40m	17:55	39m	18:35	15h 48m	11h 47m				Do, 2. Jan
Fr, 3. Jan		20:48–06:23*	9h 34m	M _\ bis AN ₋		10:48	20:48	06:23	39m	07:02	40m	07:42	40m	08:23	8h 12m	16:36	40m	17:16	40m	17:56	39m	18:36	15h 46m	11h 46m				Fr, 3. Jan
Sa, 4. Jan		22:11–06:22*	8h 11m	M _\ bis AN ₋		11:04	22:11	06:23	39m	07:02	40m	07:42	40m	08:22	8h 14m	16:37	40m	17:17	40m	17:57	39m	18:37	15h 45m	11h 45m				Sa, 4. Jan
So, 5. Jan		23:33–06:22*	6h 49m	M _\ bis AN ₋		11:18	23:33	06:22	39m	07:02	40m	07:42	40m	08:22	8h 15m	16:38	40m	17:18	40m	17:58	39m	18:38	15h 44m	11h 44m				So, 5. Jan
Mo, 6. Jan		00:55*–06:22*	5h 26m	M _\ bis AN ₋		11:31	—:—	06:22	39m	07:02	40m	07:42	40m	08:22	8h 17m	16:39	40m	17:19	40m	17:59	39m	18:39	15h 42m	11h 43m				Mo, 6. Jan
Di, 7. Jan		02:20*–06:22*	4h 02m	M _\ bis AN ₋	☾	11:46	00:55	06:22	39m	07:01	40m	07:41	40m	08:22	8h 18m	16:40	40m	17:20	40m	18:01	39m	18:40	15h 40m	11h 42m				Di, 7. Jan
Mi, 8. Jan		03:47*–06:22*	2h 35m	M _\ bis AN ₋		12:03	02:20	06:22	39m	07:01	40m	07:41	39m	08:21	8h 20m	16:42	39m	17:22	40m	18:02	39m	18:41	15h 39m	11h 41m				Mi, 8. Jan
Do, 9. Jan		05:14*–06:21*	1h 07m	M _\ bis AN ₋		12:26	03:47	06:22	39m	07:01	40m	07:41	39m	08:21	8h 22m	16:43	39m	17:23	40m	18:03	39m	18:42	15h 37m	11h 39m				Do, 9. Jan
Fr, 10. Jan		—:—:—:—	—	Mond stört		12:57	05:14	06:21	38m	07:00	39m	07:40	39m	08:20	8h 24m	16:44	39m	17:24	39m	18:04	38m	18:43	15h 35m	11h 38m				Fr, 10. Jan
Sa, 11. Jan		—:—:~:~:~	—	Mond stört		13:40	06:35	06:21	38m	07:00	39m	07:40	39m	08:20	8h 25m	16:46	39m	17:25	39m	18:05	38m	18:44	15h 33m	11h 36m				Sa, 11. Jan
So, 12. Jan		—:~:~:~:~	—	Mond stört		14:40	07:43	06:21	38m	07:00	39m	07:39	39m	08:19	8h 28m	16:47	39m	17:27	39m	18:06	38m	18:45	15h 31m	11h 35m				So, 12. Jan
Mo, 13. Jan		—:~:~:~:~	—	Mond stört	☉	15:53	08:35	06:20	38m	06:59	39m	07:39	39m	08:18	8h 30m	16:48	39m	17:28	39m	18:08	38m	18:46	15h 29m	11h 33m				Mo, 13. Jan
Di, 14. Jan		—:~:~:~:~	—	Mond stört		17:12	09:10	06:20	38m	06:59	39m	07:38	39m	08:18	8h 32m	16:50	39m	17:29	39m	18:09	38m	18:48	15h 27m	11h 31m				Di, 14. Jan
Mi, 15. Jan		—:~:~:~:~	—	Mond stört		18:32	09:36	06:19	38m	06:58	39m	07:38	39m	08:17	8h 34m	16:51	39m	17:31	39m	18:10	38m	18:49	15h 24m	11h 29m				Mi, 15. Jan
Do, 16. Jan		18:50–19:49	59m	AN ₊ bis M ₇		19:49	09:54	06:19	38m	06:58	39m	07:37	39m	08:16	8h 36m	16:53	39m	17:32	39m	18:11	38m	18:50	15h 22m	11h 28m				Do, 16. Jan
Fr, 17. Jan		18:51–21:02	2h 10m	AN ₊ bis M ₇		21:02	10:08	06:18	38m	06:57	39m	07:36	38m	08:15	8h 39m	16:54	38m	17:33	39m	18:13	38m	18:51	15h 19m	11h 26m				Fr, 17. Jan
Sa, 18. Jan		18:53–22:12	3h 19m	AN ₊ bis M ₇		22:12	10:20	06:18	38m	06:56	39m	07:35	38m	08:14	8h 41m	16:56	38m	17:35	39m	18:14	38m	18:53	15h 17m	11h 24m				Sa, 18. Jan
So, 19. Jan		18:54–23:21	4h 27m	AN ₊ bis M ₇		23:21	10:31	06:17	38m	06:55	39m	07:35	38m	08:13	8h 44m	16:57	38m	17:36	39m	18:15	38m	18:54	15h 14m	11h 22m				So, 19. Jan
Mo, 20. Jan		18:55–00:30*	5h 34m	AN ₊ bis M ₇		—:—	10:42	06:16	38m	06:55	39m	07:34	38m	08:12	8h 46m	16:59	38m	17:38	39m	18:17	38m	18:55	15h 12m	11h 20m				Mo, 20. Jan
Di, 21. Jan		18:57–01:40*	6h 43m	AN ₊ bis M ₇	☾	00:30	10:54	06:16	38m	06:54	39m	07:33	38m	08:11	8h 49m	17:01	38m	17:39	39m	18:18	38m	18:57	15h 09m	11h 18m				Di, 21. Jan
Mi, 22. Jan		18:58–02:52*	7h 53m	AN ₊ bis M ₇		01:40	11:09	06:15	38m	06:53	38m	07:32	38m	08:10	8h 51m	17:02	38m	17:41	38m	18:20	38m	18:58	15h 06m	11h 15m				Mi, 22. Jan
Do, 23. Jan		18:59–04:05*	9h 05m	AN ₊ bis M ₇		02:52	11:27	06:14	38m	06:52	38m	07:31	38m	08:09	8h 54m	17:04	38m	17:42	38m	18:21	38m	18:59	15h 04m	11h 13m				Do, 23. Jan
Fr, 24. Jan		19:01–05:17*	10h 16m	AN ₊ bis M ₇		04:05	11:51	06:13	38m	06:51	38m	07:30	38m	08:08	8h 57m	17:05	38m	17:44	38m	18:22	38m	19:01	15h 01m	11h 11m				Fr, 24. Jan
Sa, 25. Jan		19:02–06:11*	11h 09m	AN ₊ bis AN ₋		05:17	12:25	06:12	38m	06:50	38m	07:29	37m	08:07	9h 00m	17:07	37m	17:45	38m	18:24	38m	19:02	14h 58m	11h 09m				Sa, 25. Jan
So, 26. Jan		19:03–06:10*	11h 06m	AN ₊ bis AN ₋		06:23	13:14	06:11	38m	06:49	38m	07:28	37m	08:06	9h 03m	17:09	37m	17:47	38m	18:25	38m	19:03	14h 55m	11h 06m				So, 26. Jan
Mo, 27. Jan		19:05–06:09*	11h 04m	AN ₊ bis AN ₋		07:18	14:18																					